AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings, of claims in the application:

Listing of Claims

Claim 1 (Original) A medical device comprising a stimulation compound that stimulates production of VEGF, the medical device being an implantable medical device, a catheter, a dressing or a surgical instrument.

Claim 2 (Original) The medical device of claim 1 wherein the stimulation compound comprises a polypeptide.

Claim 3 (Original) The medical device of claim 2 wherein the polypeptide comprises hypoxia-inducible factor 1.

Claim 4 (Original) The medical device of claim 2 wherein the polypeptide comprises hypoxia-inducible factor 1-alpha.

Claim 5 (Original) The medical device of claim 2 wherein the polypeptide comprises a mutant form of hypoxia-inducible factor 1-alpha that is more stable than the native form under non-hypoxia conditions.

Claim 6 (Original) The medical device of claim 2 wherein the polypeptide binds to the VEGF hypoxia response element.

Claim 7 (Original) The medical device of claim 1 wherein the stimulation compound stimulates transcription of VEGF.

Claim 8 (Original) The medical device of claim 1 wherein the medical device comprises a heart valve prosthesis.

Claim 9 (Original) The medical device of claim 8 wherein the valve has flexible leaflets.

Claim 10 (Original) The medical device of claim 9 wherein the flexible leaflets comprise a polymer.

Claim 11 (Original) The medical device of claim 9 wherein the flexible leaflets comprise tissue.

Claim 12 (Original) The medical device of claim 11 wherein the stimulation compound is associated with the tissue leaflets.

Claim 13 (Original) The medical device of claim 9 wherein the heart valve prosthesis further comprises a support structure supporting the leaflets and a sewing cuff.

Claim 14 (Original) The medical device of claim 13 wherein the sewing cuff comprises fabric and wherein the fabric is associated with the stimulation compound.

Claim 15 (Original) The medical device of claim 13 wherein the stimulation compound is associated with the support structure supporting the leaflets.

Claim 16 (Original) The medical device of claim 8 wherein the valve has a rigid pivoting occluder.

Claim 17 (Original) The medical device of claim 1 comprising a sewing cuff wherein the stimulation compound is associated with the sewing cuff.

Claim 18 (Original) The medical device of claim 1 wherein the medical device comprises a vascular graft.

Claim 19 (Original) The medical device of claim 1 wherein the medical device comprises a polymer material in which VEGF production stimulator is incorporated within the polymer material.

Claim 20 (Original) The medical device of claim 1 wherein the prosthesis comprises tissue.

Claim 21 (Original) The medical device of claim 20 wherein the tissue is crosslinked.

Claim 22 (Original) The medical device of claim 20 wherein the tissue is uncrosslinked.

Claim 23 (Original) The medical device of claim 1 wherein the prosthesis comprises at least about 10 mg of stimulation compound.

Claim 24 (Original) The medical device of claim 1 wherein the prosthesis comprises at least about 100 mg of stimulation compound.

Claim 25 (Original) The medical device of claim 1 wherein the medical device is a vascular stent comprising a biocompatible material.

Claim 26 (Original) The medical device of claim 1 wherein the stimulation compound is releasably bound to a material of the medical device.

Claim 27 (Original) The medical device of claim 26 wherein the stimulation compound is adhesively bonded.

Claim 28 (Original) The medical device of claim 26 wherein the stimulation compound is covalently bonded.

Claim 29 (Original) The medical device of claim 26 wherein the stimulation compound is microencapsulated.

Claim 30 (Original) The medical device of claim 1 wherein the medical device comprises an annuloplasty ring.

Claim 31 (Currently Amended) A method for producing a medical device, the method comprising associating a stimulation compound with a biocompatible material to stimulate the production of growth factors.

Claim 32 (Original) The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises direct association.

Claim 33 (Original) The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises chemical bonding.

Claim 34 (Original) The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises adhesive bonding.

Claim 35 (Original) The method of claim 31 wherein associating the stimulation compound with the biocompatible material comprises incorporating the stimulation compound into the matrix of the biocompatible material.